

DIFFERENCE AMPLIFIER

ABSTRACT

A voltage regulation circuit. The voltage regulator includes an input stage, a reference voltage circuit, a gain stage, and an output stage. The reference voltage
5 circuit is coupled to one input of the input stage, and the output stage is coupled to another input of the input stage. The gain stage includes a buffer device coupled to the output of the input stage and a drive circuit coupled to the output stage. The buffer device is operable to provide isolation between the input stage and the drive circuit. The drive circuit may include a first transistor coupled to the output stage, a
10 base current translation circuit, and a current divide circuit coupled to the first transistor and to said base current translation circuit. The input stage may be biased with a substantially constant bias current, such that output dependent current loading effects are avoided.